

25 Years of Deep Space Exploration at ESA
Marcello Coradini
ESA Programs Coordinator @ JPL

The European adventure in the deep space started in 1985 with the launch of the GIOTTO mission to comet Halley. This first, rather simple, deep space probe was followed in the course of the years, by a large number of satellites and probes directed almost in any corner of the Solar System.

From Mercury, with the BepiColombo composite spacecraft, to Venus with Venus Express, the Moon with SMART-1, the red planet with Mars Express, the Saturn System with Cassini/Huygens, Comet 67P/Churyumov-Gerasimenko and the asteroids Steins and Lutetia with the Rosetta, ESA and the European scientists are present and actively carrying out scientific observations.

In the near future the Robotic Exploration Programme, defined in a close collaboration with NASA, will allow ESA to be again in Mars orbit with the TGO satellite and on the surface of the red planet with the ExoMars rover, while a new interplanetary probe might be travelling to Jupiter to explore its satellite system.

In about 25 years ESA, the European Scientists and the European Industry have reached a high level of competitiveness, competence and experience. New worlds have been explored, a wealth of new technologies and systems have been developed. Exploration of the Solar System with robots, and one day with humans, will continue to offer challenges and excitement for many years to come.